REMARKS

Claims 1-30 were originally pending in the Application. In a Preliminary Amendment and Response to Restriction Requirement earlier filed on June 12, 2003, Applicants elected with traverse to pursue prosecution of claims within the Group II identified by the Examiner. Therefore, at the time of the mailing of the present Office Action on April 7, 2004, claims 1-8 and 25-28 stand withdrawn with traverse, and claims 9-24, 29, and 30 are pending. The Office Action rejects claims 9-24, and allows claims 29 and 30. This Response is filed in response to the Office Action mailed on April 7, 2004. The Applicants thank the Examiner for acknowledging that claims 29 and 30 are patentable.

Rejections Under 35 U.S.C. §103

Claims 9-15 and 17-23 were rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 5,991,763 to Long et al. (hereinafter "Long").

Rejection of Claims 9 and 17 in View of Long

Claim 9 is directed to a method for mapping a first file object identifier having a first bite size to a second file object identifier having a second bite size and recites:

> (a) receiving said first file object identifier associated with a file object;
> (b) transforming said first file object identifier into said second file object identifier based on at least one file system characteristic; and
> (c) providing said second file object identifier to facilitate access to said file object.

The Office Action suggests, with respect to claim 9, that Long discloses steps (a) and (c) of claim 9, and that it would have been obvious to one [of] ordinary skill in the art "to modify the teachings of Long with transforming said first file object identifier into said second file object identifier based on at least one file system characteristic" in order "to provide additional data storage capacity."

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Generally, Long teaches "efficiently embedding data files and file names into object files to create a virtual file system for use by software running on a computer system." (Col. 1, lines 16-19.) Long further teaches "a method, system, and software for creating object files from data files by taking snapshots of the data files" (Col. 2, lines 15-17) and that "a snapshot of the data file is created and converted into an object data file." (Col. 2, lines 24-25.) Additionally, Long teaches that "[o]bject files which correspond to physical files may be created such that they may be linked together with other files." (Col. 4, lines 39-41.) Finally, Long teaches that "[i]n order to create object files from data files, the data files are usually converted into source code for a higher programming language." (Col. 4, lines 43-46.) Therefore, Long takes a data file and converts it into an object file.

Unlike Applicants' invention, Long does not teach or suggest transforming a first file object *identifier* that identifies a file object to a second file object *identifier* to facilitate access to the *same* file object. Long instead converts a data file to an object file to create a virtual file system. Thus, Long takes one file and *creates* another file for its virtual file system. Therefore, the Applicants respectfully submit that claim 9 is patentable over Long because Long does not teach or suggest at least "transforming said first file object *identifier* into said second file object *identifier*...to facilitate access to *said* file object," as recited by Applicants' claim 9. Further, the Applicants submit that claims 10-15, which depend on claim 9 and include all of the limitations therein, are also patentable in view of Long.

Claim 17 is directed to an article of manufacture having computer-readable program means embodied therein for mapping a first file object identifier having a first bite size to a second file object identifier having a second bite size and recites:

> (a) computer-readable program means for receiving said first file object identifier associated with a file object;
> (b) computer-readable program means for transforming said first file object identifier into said second file object identifier based on at least one file system characteristic; and
> (c) computer-readable programs means for providing said second file object identifier to facilitate access to said file object.

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The Office Action suggests that claim 17 is obvious in view of Long for the reasons stated above with respect to claim 9. As discussed above regarding claim 9, Long does not teach transforming a first file object identifier that identifies a file object to a second file object identifier to facilitate access to the same file object. Claim 17 recites computer-readable program means for receiving said first object identifier associated with a file object, transforming said first file object identifier into said second file object identifier based on at least one file system characteristic, and providing said second file object identifier to facilitate access to said file object. Thus, the Applicants respectfully submit that, since Long does not teach or suggest at least the "transforming" element (step (b)) and the "providing" element (step (c)) of claim 17, claim 17 is patentable in view of Long. Further, the Applicants submit that claims 18-23, which depend on claim 17 and include all of the limitations therein, are also patentable in view of Long.

Schmuck Does Not Cure the Deficiencies in Long

Claims 16 and 24 were rejected under 35 U.S.C. §103 as being unpatentable over Long in view of U.S. Patent No. 5,950,199 to Schmuck et al. (hereinafter "Schmuck"). In particular, the Office Action suggests that Long teaches the claimed subject matter except "wherein said second file object identifier is a POSIX file." (Page 6.) The Office Action also states that Schmuck teaches the POSIX ACL standard with regard to the creation of a new file or directory. (Page 2.) The Office Action goes on to state it would have been obvious "to modify the combined teachings of Long and Schmuck with a POSIX file," and "[s]uch modification would allow the teachings of Long and Schmuck to provide a shared disk file system where a file system instance on each machine has identical access to all of the disks coupled to and forming a part in the file system." (Page 3.)

Schmuck generally teaches "a shared disk file system where a file system instance on each machine has identical access to all of the disks coupled to and forming a part in the file system." (Col. 3, lines 27-30.) More specifically, Schmuck teaches "when a new file is created, its extended attributes are set to the same values as an existing file that it is derived from." (Col.

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27, lines 55-57.) Schmuck, however, has nothing to do with transforming file object identifiers or even with file object identifiers themselves and instead deals with its shared disk file system. (Abstract). As indicated above, Long does not teach or suggest the recited elements of claims 9 and 17. Thus, the Applicants respectfully submit that Long and Schmuck, alone and in combination, do not teach or suggest at least the "transforming" and "providing" elements of step (b) and step (c) of claims 9 and 17. Therefore, Applicants submit that claims 9 and 17 are patentable in view of Long and Schmuck. Further, the Applicants submit that claims 10-16 and 18-24, which depend on claims 9 and 17, respectively, and include all of the limitations therein, are also patentable in view of Long and Schmuck.

Therefore, in light of the foregoing reasons, Applicants respectfully request that the rejections under 35 U.S.C. §103 be reconsidered and withdrawn.

Rejection of Claims 9 and 17 Over Tamer in View of Cutler

Claims 9-15 and 17-23 were rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 6,542,909 to Tamer et al. (hereinafter "Tamer") in view of U.S. Patent No. 5,832,274 issued to Cutler et al. (hereinafter "Cutler").

The Office Action suggests, with respect to claims 9 and 17, that Tamer discloses steps (a) and (c) of claims 9 and 17, and Cutler "discloses [the] steps of translating [an] object name to [an] object identifier." (Page 7.) The Office Action also suggests that "it would have been obvious to one [of] ordinary skill in the art...to modify the combined teachings of Tamer and Cutler with [the] steps of transforming said first file object identifier into said second file object identifier based on at least one file system characteristic." (Pages 7-8). This "modification would allow the teachings of Tamer and Cutler to provide a method for transferring a file system and access rights associated with the file system from a first environment to a second environment which stores mapping information." (Page 8.) Applicants respectfully traverse the rejection.

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Tamer generally teaches "manipulating data in a storage device" by copying data from one logical object that is defined on the host computer to another." (Abstract.) More specifically, Tamer teaches "copying one file to another, for any blocks of data of file A or file B that are not logically contiguous at each mapping layer." (Col. 3, lines 61-63.) Thus, Tamer teaches copying from one file to another file, and does not teach "transforming said first file object identifier into said second file object identifier based on at least one file system characteristic" as claimed in step (b) and also as disclosed in the Office Action. (Page 7). Since this element (step (b)) is not disclosed, Tamer cannot teach "providing said second file object identifier" because, as stated in the Office Action, the second file object identifier does not exist. Thus, Tamer does not disclose at least step (b) and step (c) of the present invention.

Cutler generally teaches "migrating a file system and access rights associated with the file system from a network operating system in a first environment to a network operating system in a second environment." (Col. 3, lines 11-14.) More specifically, Cutler teaches "[m]echanisms for translating object identifier 20 to object name 28, or translating object name 28 to object identifier 20." (Col. 6, lines 41-43.) Cutler teaches the difference between an "object name" and an "object identifier" by disclosing "[t]he first environment has a first object reference list, which includes a list of objects in the first environment, each object having an object name and an object identifier." (Col. 3, lines 44-47.) Thus, as the translation in Cutler is from an "object identifier" to an "object name," the object identifier is different than the object name.

The present invention teaches, in step (b), "transforming said first file object identifier into said second file object identifier, " and teaches in step (c) "providing said second file object identifier to facilitate access to said file object." In contrast to Cutler's translation from an identifier to a name, Applicants' invention transforms from an identifier to an identifier. Cutler does not teach the existence of this second file object identifier, rather, Cutler teaches the existence of an object name and an object identifier. Cutler's teaching of an "object identifier 20" and an "object name 28" are different from "a first file object identifier" and a "second file object identifier," and, at least for this reason, Cutler does not teach at least step (b) and step (c) of Applicants' claim 9 and claim 17.

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Furthermore, Cutler "accesses the mapping information to determine which object in the second environment is associated with the object from the first environment." (Abstract.) More specifically, Cutler teaches "[t]he first environment has a first object reference list, which includes a list of objects in the first environment, each object having an object name and an object identifier," (Col. 3, lines 43-46), and that "[t]he second environment has a second object reference list containing a list of objects in the second environment." (Col. 3, lines 50-52.) Finally, Cutler teaches an "association between a first environment object and a second environment object." (Col. 3, lines 53-54.) Thus, Cutler teaches an association between two objects.

In contrast to Cutler, Applicants' invention facilitates access to the <u>same</u> file object by transforming a first object identifier to a second object identifier, and providing the second file object identifier to facilitate access to the same file object, as stated in steps (b) and (c) of claims 9 and 17. Thus, for at least this reason as well, Cutler does not teach or suggest at least steps (b) and (c) of Applicants' invention.

Therefore, the Applicants respectfully request that Tamer and Cutler, alone or in combination, do not teach or suggest at least step (b) and step (c) of the claims 9 and 17 of the claimed invention, and claims 9 and 17 are patentable in view of Tamer and Cutler. Further, the Applicants submit that claims 10-16 and 18-24, which depend from claims 9 and 17, respectively, and include all the limitations therein, are also patentable in view of Tamer and Cutler.

Schmuck Does Not Cure the Deficiencies in Tamer and Cutler

Claims 16 and 24 were rejected under 35 U.S.C. §103 as being unpatentable over Tamer in view Cutler, and further in view of Schmuck.

As discussed above, Schmuck teaches "when a new file is created, its extended attributes are set to the same values as an existing file that it is derived from." (Col. 27, lines 55-57.) Schmuck, however, has nothing to do with transforming object identifiers or even object

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identifiers themselves. Thus, the Applicants respectfully submit that, since Tamer, Cutler, and Schmuck, alone and in combination, do not teach or suggest at least the "transforming" and "providing" elements of step (b) and step (c) of claims 9 and 17, claims 9 and 17 are patentable in view of Tamer, Cutler, and Schmuck. Further, the Applicants submit that claims 10-16 and 18-24, which depend on claims 9 and 17 respectively and include all of the limitations therein, are also patentable in view of Tamer, Culter, and Schmuck.

Therefore, in light of the foregoing reasons, Applicants respectfully request that the rejections under 35 U.S.C. §103 be reconsidered and withdrawn.

SUMMARY

Claims 1-8 and 25-28 stand withdrawn with traverse; claims 9-24 stand rejected; and claims 29-30 are allowed. Applicants request that the Examiner reconsider the application and claims in light of the foregoing Response, and respectfully submit that the pending claims are in condition for allowance.
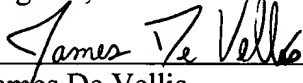
If, in the Examiner's opinion, a telephonic interview would expedite the favorable prosecution of the present application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues, and to work with the Examiner toward placing the application in condition for allowance.

Applicants believe that no additional fees are necessitated by the present Amendment. However, in the event that any additional fees are due, the Commissioner is hereby authorized to charge any such fees to Attorney's Deposit Account No. 20-0531.

Regards,

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